

## **Form RE-08 REQUIREMENTS: CAM**

---

### **Compliance Assurance Monitoring**

(567 IAC 22.108(3)"d"; 40 CFR 64; and 1990 Clean Air Act, as amended, Section 504)

This form will assist you in identifying emission units that are subject to Compliance Assurance Monitoring (CAM) requirements. CAM was developed by the Environmental Protection Agency and became effective on November 21, 1997. The full text of the regulation is located in Title 40, Code of Federal Regulations, Part 64 (40 CFR 64). CAM applies to some major sources that are required to obtain a Title V operating permit. Facilities that operate emission control devices subject to federally enforceable regulations may be subject to CAM.

The CAM rule aims to have owners and operators maintain their control equipment at levels that assure compliance. It requires owners and operators to develop CAM plans that select representative parameters upon which compliance can be assured. CAM plans are required as part of the Title V operating permit application. Iowa DNR is responsible for approving the CAM plans and incorporating the appropriate terms and conditions in the Title V permit as specified in 40 CFR 64.6(c) - (e). For sources with approved CAM plans, existing periodic monitoring requirements will be replaced by CAM requirements.

### **1) APPLICABILITY - 40 CFR 64.2**

CAM applicability is determined on a **pollutant-by-pollutant basis for each emissions unit**. The flowchart on page 4 of this form will assist you in determining CAM applicability.

CAM applies to each pollutant-specific emissions unit (PSEU)<sup>1</sup> that meets ALL of the following criteria:

- Located at a major source required to obtain a Title V operating permit;
- Subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof) that is not exempt (see list of exemptions on page 2 of this form);
- A control device is used to achieve compliance with the emission limitation or standard;
- The potential uncontrolled emissions of the applicable regulated air pollutant are greater than or equal to the major source thresholds (ex. 100 tons per year of particulate matter (PM-10), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC), carbon monoxide (CO), or lead; 10 tons per year of any hazardous air pollutant (HAP); or 25 tons per year of any combination of HAPs); and
- The PSEU is not an exempt backup utility power emissions unit as defined in the exemptions on page 2 of this form.

---

<sup>1</sup> *Pollutant-specific emissions unit* means an emissions unit considered separately with respect to each regulated air pollutant. (40 CFR 64.1)

### Exemptions - 40 CFR 64.2(b)

A. Emission limitations or standards:

- New Source Performance Standards (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP) proposed after November 15, 1990
- Stratospheric ozone protection requirements
- Acid Rain program requirements
- Emission limitations or standards that apply solely under an emissions trading program
- An emissions cap that meets the requirements specified in 40 CFR 70.4(b)(12)
- Emission limitations or standards for which a Title V operating permit specifies a continuous compliance determination method, as defined in 40 CFR 64.1

B. Municipally-owned backup utility power emission units where:

- the unit is exempt from all acid rain program monitoring requirements,
- the unit operates for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations (*note:* the facility must provide documentation of historical operating data and relevant contractual obligations to show that this criteria is satisfied), and
- actual emissions from the unit are less than 50 percent of the major source thresholds.

2) After reviewing the information above, check one of the following boxes:

- ☐ NO, my facility DOES NOT have any pollutant-specific emission units subject to CAM requirements. Go to Form **RE-00 REQUIREMENTS REVIEW**, question 14b, and answer NO.
- ☐ YES, my facility DOES have one or more pollutant-specific emission units (PSEU) subject to CAM requirements. Identify those PSEUs in the following table. Attach or substitute the following table with other documents if needed. Continue to item 3.

#### Pollutant Specific Emission Units that are Subject to CAM Requirements

EP	EU	CE	CE Description	Controlled Pollutant

**3) CAM PLAN GUIDELINES - 40 CFR 64.3 and 64.4**

A CAM plan is required for each pollutant-specific emissions unit subject to CAM. If a single control device is common to more than one pollutant-specific emissions unit, you may provide a CAM plan that identifies all of the units covered by the plan. Also, if a pollutant-specific emissions unit is controlled by multiple control devices that are similar in design and operation, you may submit a CAM plan that applies to all of the control devices. In general, a CAM plan must include the following information:

- Identification of the emissions unit, applicable emissions limit or standard, and description of the control technology;
- Description of the indicators to be monitored;
- Description of the indicator ranges, or the process by which indicators are to be established;
- Description of the performance criteria for monitoring, including:
  - specifications for obtaining representative data
  - verification procedures to confirm the monitoring equipment's operational status
  - quality assurance and control procedures
  - monitoring frequency
    - 4 times per hour (minimum) if **post**-control emissions are greater than or equal to the major source thresholds
    - 1 time per day (minimum) if **post**-control emissions are less than the major source thresholds
  - data averaging period;
- Justification for the proposed monitoring;
- Emissions test data; and if necessary,
- An implementation plan for installing, testing, and operating the monitoring equipment.

For detailed information regarding CAM plan requirements read 40 CFR 64.3 (monitoring design criteria) and 40 CFR 64.4 (submittal requirements). If your initial Title V permit required an operation and maintenance (O&M) plan, most of the information above may already be identified. Also, EPA has several example CAM plans available on the internet at: <http://www.epa.gov/ttn/emc/cam.html>. Continue to item 4.

**4) DEADLINES FOR CAM PLANS - 40 CFR 64.5**

CAM plans are due as part of an initial, significant modification, or renewal Title V permit application. The majority of CAM plans will be due with renewal applications. Refer to the flowchart on page 4 of this form to determine when your CAM plan(s) are due. Continue to item 5.

- 5) Attach any required CAM plan(s) to the back of this form. Go to Form **RE-00 REQUIREMENTS REVIEW**, question 14b, and answer YES.

## CAM Applicability Flowchart

(Applicability is determined on a pollutant-by-pollutant basis for each emissions unit)

